

## **REMARKS**

### **Specification**

The Examiner objected to the Specification indicating that the word “that” should be changed to “than.” Applicant has made this correction.

### **Claim Objections**

The Examiner objected to claims 7, 16 and 20. Applicant has addressed each of the concerns of the Examiner. Applicant believes that claims 7, 16 and 20 are no longer objectionable.

### **Claim Rejections - 35 U.S.C. §112**

The Examiner objected to claims 17 and 18 pursuant 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has addressed the rejection through amendment and believes the rejection to be overcome.

### **Claim Rejections - 35 U.S.C. §103**

The Examiner rejected claims 1-17 under 35 U.S.C. §103(a) as being unpatentable over *Ross* (US 1,986,981) in view of *Tanaka, et al.* (US 6,053,653) (*Tanaka*). Applicant believes that both *Ross* and *Tanaka* fail to teach all of the limitations of the recited claims. Moreover, Applicant believes the combination to be improper. As explained in greater detail below, claims 1-17 stand in condition for allowance.

With respect to claim 1, the Examiner acknowledges that *Ross* fails to teach “the first hole being a threaded hole, in which a first threaded portion of the first fixing member engages the first hole.” [Non-final Office Action (1/16/2003) page 4]. The Examiner seeks to supply this missing element through *Tanaka*, arguing that *Tanaka* teaches “a first hole 52 being a threaded hole, in which a first threaded portion 65 of the first fixing member engages the first hole 52...in order to secure the first component 2 to the second component 1.” However, this reading of *Tanaka* is misplaced. Claim 1 requires that the first component with the first hole being threaded “is situated between the second component and the third component.” In *Tanaka*, there is no first component situated between a second and third component as required by claim 1. Accordingly, the so-called “first hole 52” is not in fact a first hole as defined by claim 1 because it is not on a first component between a second and third components. Therefore, *Ross* and *Tanaka* fail to teach each of the limitations of claim 1.

In addition, even assuming that *Ross* and *Tanaka* teach all of the limitations of claim 1, the Examiner fails to identify any suggestion or motivation to combine these references to teach the invention of claim 1. As *Tanaka* and *Ross*, as well as the other references cited by the Examiner make evident, there are a wide variety of ways to assemble and secure various components. There is, however, no reason offered by the Examiner that one of ordinary skill in the art would look to *Tanaka* to supply the missing elements of the invention in view of the base reference *Ross*. Indeed, none of the components of Figure 4 of *Ross* are threaded to receive the fixing member. There is no suggestion or motivation offered by *Ross* to thread these components. In face, the *Tanaka* discloses a dual cutting thread arrangement for securing two components with a

“blind hole”. Nothing in *Tanaka* would suggest threading the *Ross* washer 3. *Ross* doesn’t discuss a blind hole, and certainly then would be no reason to thread washer 3. At most, *Tanaka* might suggest a dual thread be driven into nut 16. Accordingly, the combination of *Ross* and *Tanaka* is improper. Moreover, *Tanaka* teaches a way from its combination with *Ross* to teach the present invention. *Tanaka* states:

Further, because the fastening strength between the first and second members 1 and 2 is obtained by threading force between the small-diameter screw 35 and the threader hole 24, a function required at the connection portion between the large-diameter screw 33 and the small-diameter hole 14 and 22 is only a positioning function and it is unnecessary to take the fastening strength into the consideration.

[*Tanaka*, column 7, ll 3-9]. Thus, *Tanaka* suggests that no fastening strength is required for the first hole whereas the present invention requires there to be a strong connection at this location to secure the components together.

It should also be noted that *Tanaka* teaches that the asserted first hole has threads created from tapping by screw 63. [*Tanaka*, column 8, ll 42-44]. However, the holes of *Ross* are not sized for tapping but are, instead, sized to receive without interference rivet 1. Accordingly, *Ross* may not be combined with *Tanaka* for this reason. For the foregoing reasons, claim 1 and its dependents, claims 2-18, are allowable over the cited references.

Claim 15 requires the first component to be “sealed relative to the second component and the first component is sealed relative to the third component.” *Ross* does not disclose any sealing between components. Accordingly, for this additional reason, claim 15 is separately allowable.

As to claim 16, the Examiner readily acknowledges that *Ross* and *Tanaka* do not “explicitly include forces acting on the first fixing member preventing rotation of the first

fixing member relative to the first component during securing and releasing of the third component by the second fixing [member].” [Final Office Action (1-16-2003), page 7]. However, nothing within *Ross* or *Tanaka* teaches that the first fixing member is secured against rotation relative to the first component “during securing and releasing of the third component by the second fixing member.” While such a feature is accomplished by the present application by having threads of differing pitch or using a locking compound, there is no such provision within either *Ross* or *Tanaka*. In fact, as the second fixing member is secured or released, fixing member is free to rotate. Therefore, claim 16 is allowable over the cited references.

Claim 17 requires a first threaded portion having a greater diameter than a second threaded portion. The Examiner readily acknowledges that *Ross* fails to teach such a fixing member. The Examiner again seeks to rely on *Tanaka* to supply this missing limitation. However, there is no suggestion or motivation to use the fixing member of *Tanaka* with the apparatus of *Ross*. *Ross* teaches components having holes all of the same diameter. Therefore, there would be no need to have a fastening member of differing diameters. The combination of *Ross* and *Tanaka* is not only improper but infeasible. Therefore, claim 17 is allowable over the cited references.

Claim 18 requires that the first threaded portion have “a pitch which is different from the pitch of the first hole, and a second threaded portion has a pitch which is substantially equal to the pitch of the second fixing member.” Neither *Ross* nor *Tanaka* teach this feature as recognized by the Examiner. Instead, the Examiner relies upon the triple combination of *Ross*, *Tanaka* and *Clover, Jr. (Clover)* to establish each of the limitations of claim 18. The Examiner provides no suggestion or motivation to combine

*Clover* with *Ross* or for that matter with *Tanaka*. Instead, the Examiner relies upon a short statement in *Clover* that "the purpose of different pitches is to enable locking of the assembly at different axial positions." The Examiner fails to explain why such a feature would be desirable for either *Ross* or *Tanaka*. There is simply no reason offered to combine all three references. Moreover, *Ross* has no components with threaded holes. Without such threaded holes, there is even less reason to adopt the teachings of *Clover*. Combining *Clover* with *Ross* would, in fact, be impossible to accomplish the objective of *Clover*. *Tanaka* is no more helpful. There is simply nothing within *Tanaka* that provides motivation or suggestion to have threads of differing pitch much less as required by claim 18 "a pitch which is different from the pitch of the first hole, and the second threaded portion has a pitch which is substantially equal to the pitch of the second fixing member." For this reason, claim 18 is additionally allowable.

Independent claim 19 is allowable for much the same reason that independent claim 1 is allowable. Specifically, *Ross* does not teach a threaded first hole while *Tanaka* fails to teach a first component having a threaded hole and situated between a second and a third component. Applicant has further amended claim 19 to delineate additional steps that distinguish the present invention from the cited references. Therefore, claim 19 is allowable over the cited reference.

Claim 20 is also allowable for much the same reason. Again, *Ross* and *Tanaka* fail to teach all of the limitations of claim 20. The Examiner fails to provide any motivation or suggestion to combine these references. There is nothing within either *Ross* or *Tanaka* that discloses how the components are to be assembled. Claim 20 is thus allowable.

In addition, Applicant has added claims 21-28 that have limitations to further distinguish the present invention from the cited references. None of these features are taught by any of the references. Accordingly, new claims 21-28 are allowable over the cited references. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for the \$210.00 fee for excess claims. If there are any further fees you are also hereby authorized to charge said Deposit Account.

Respectfully submitted,

CARLSON, GASKEY & OLDS

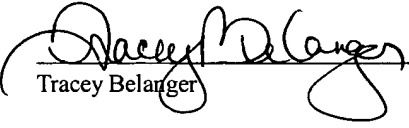
By: 

Anthony P. Cho  
Registration No. 47,209  
400 W. Maple Rd., Ste. 350  
Birmingham, MI 48009  
(248) 988-8360

Dated: April 16, 2003

**CERTIFICATE OF MAILING**

I hereby certify that the enclosed Response is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Assistant Commissioner of Patents, Washington D.C. 20231 on April 16, 2003

  
Tracey Belanger

N:\Clients\MERITOR\IP01342\PATENT\Response 4-03.doc